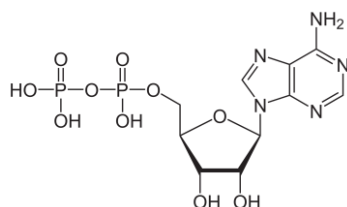
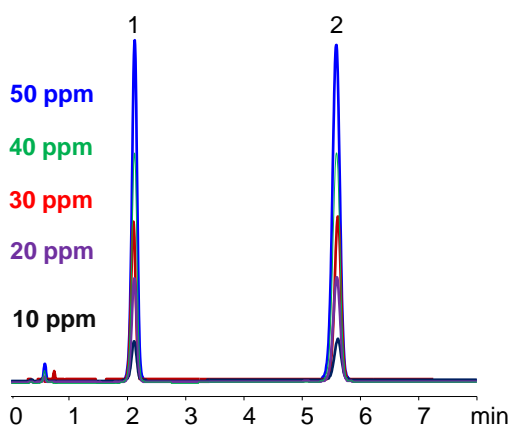
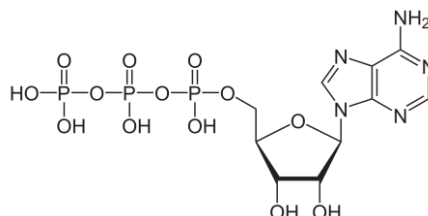


Quantitative UV HPLC Analysis of Adenosine Diphosphate/Adenosine Triphosphate Conversion on Amaze HA Mixed-Mode Column

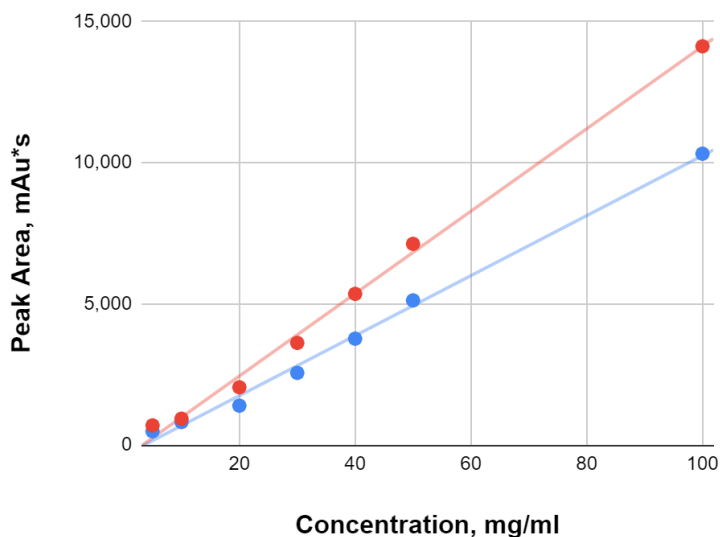
1. Adenosine 5'-diphosphate (RSD 0.998)



2. Adenosine 5'-triphosphate (RSD 0.997)



Calibration Plot for Adenosine Diphosphate and Adenosine Triphosphate



Column: Amaze HA
Dimensions: 3.0x50 mm, 3 μ m, 100A
Mobile phase: ACN/Water/pH 2.0 Na_2HPO_4
Flow rate: 0.6 ml/min
Detection: 275 nm
Sample: 5 to 100 ppm (LOD/LOQ 50 ppb)

Application Notes

A method for the analysis of adenosine diphosphate and adenosine triphosphate was developed to monitor the kinetics of adenosine diphosphate/adenosine triphosphate biochemical conversion. Calibration plot for both compounds was produced covering a wide range for both ADP and ATP (50 ppb to 100 ppm range).

Sample preparation techniques were developed, involving precipitation, centrifugation, and SPE. The calibration plot shows a near-perfect linearity. The method and column can be used for the quantitative analysis of nucleotides in various sample matrices. The method is compatible with UV but can be converted to LC/MS by replacing phosphate buffer with ammonium formate buffer. [Contact us](#) if you need help with any HPLC method development. We are highly efficient and affordable